



NC House Select Committee
October 24, 2016

Hurricane Matthew Logistics and Response

Mike Holder, PE



TROPICAL WEATHER OUTLOOK

Valid Saturday, October 08, 2016



Hurricane MATTHEW [5PM SAT]

Location: Approx. 15 miles WSW of Cape Fear, NC

Max Sustained Winds: 75 MPH

Movement: ENE at 13 MPH

Min Central Pressure: 28.85" (977 mb)



Matthew's strongest winds will shift to the back side of the storm.

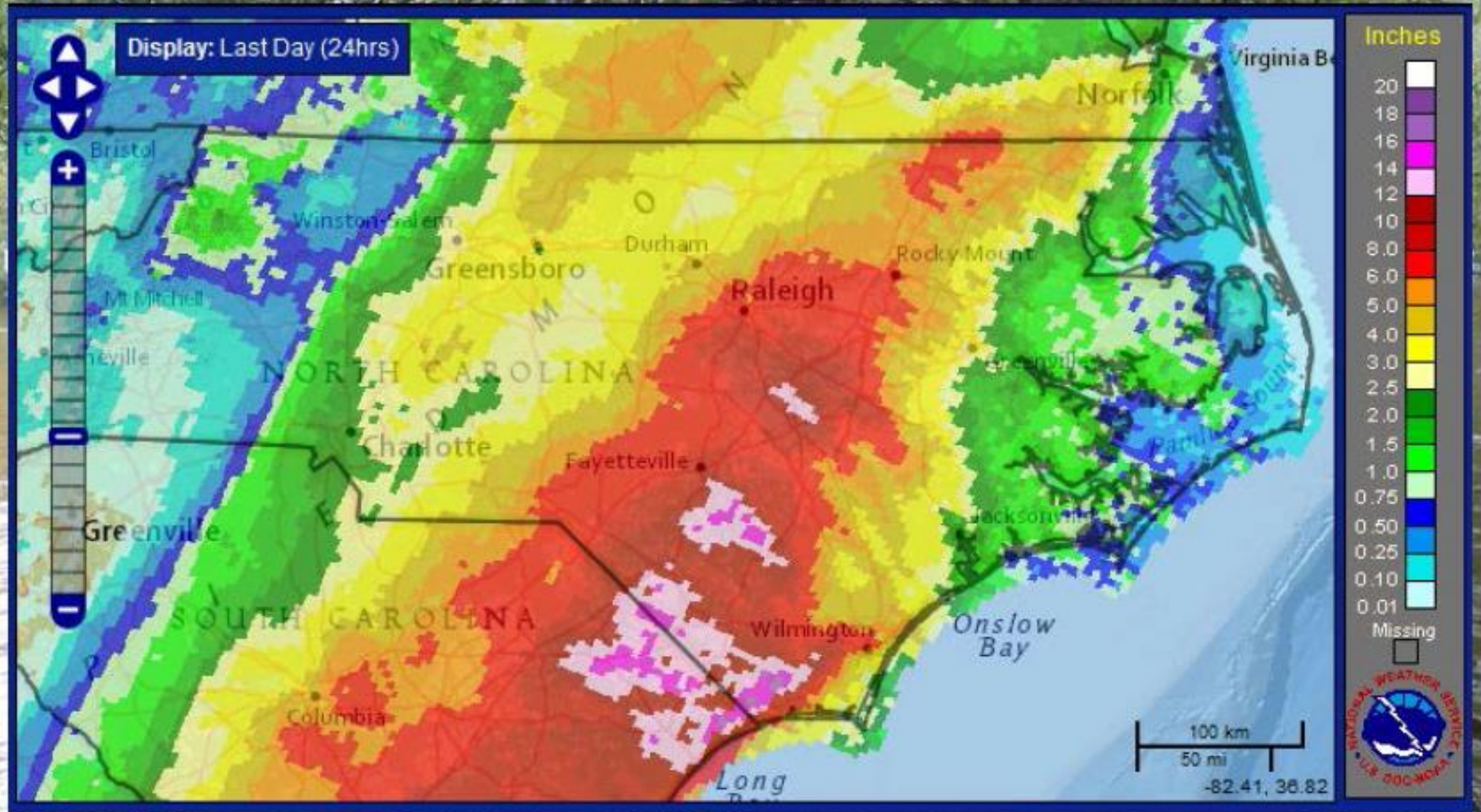
These winds will persist over land even after Matthew moves away from NC

- **Hurricane Warning:** North of the NC/SC border to Surf City
- **Tropical Storm Warning:** North of Surf City to Duck (including Pamlico & Albemarle Sounds)
- **Hurricane Watch:** North of Surf City to Cape Lookout

NGA, GEBCO

ESTIMATED RAINFALL

LAST 24 HOURS – AS OF 6PM



RAINFALL REPORTS

HURRICANE MATTHEW

Valid Sunday, October 09, 2016 (1:30 PM)



Location	Rainfall
White Oak (Bladen)	16.71"
Goldsboro (Wayne)	15.24"
Hope Mills (Cumberland)	14.71"
Chadbourn (Columbus)	12.90"
Lumberton (Robeson)	12.47"
Elm City (Nash)	11.95"
Edenton (Chowan)	11.88"
Windsor (Bertie)	11.07"
Point Harbor (Currituck)	10.73"
Easons Crossroads (Gates)	10.60"
Garner (Johnston)	10.22"

WIND REPORTS

HURRICANE MATTHEW

Valid Sunday, October 09, 2016 (as of 2:00PM)



Location	Max Wind Gust
St. James Plantation (Brunswick)	86 mph
Hatteras (Dare)	82 mph
Federal Point (New Hanover)	82 mph
Jacksonville (Onslow)	72 mph
Beaufort (Carteret)	70 mph
Elizabeth City (Pasquotank)	69 mph
Lumberton (Robeson)	67 mph
Cherry Point (Craven)	64 mph
Back Island (Pender)	64 mph
Currituck (Currituck)	62 mph
Greenville (Pitt)	59 mph

NCDOT Preparing for Matthew

Division of Highways – preparation began Tuesday, October 4th

- Frequent communication with field staff
- Field prepared their equipment and personnel
- Reviewed emergency operations procedures



During the Storm

Communication with other state agencies and local government
Activation of State Emergency Response Team



Response and Recovery

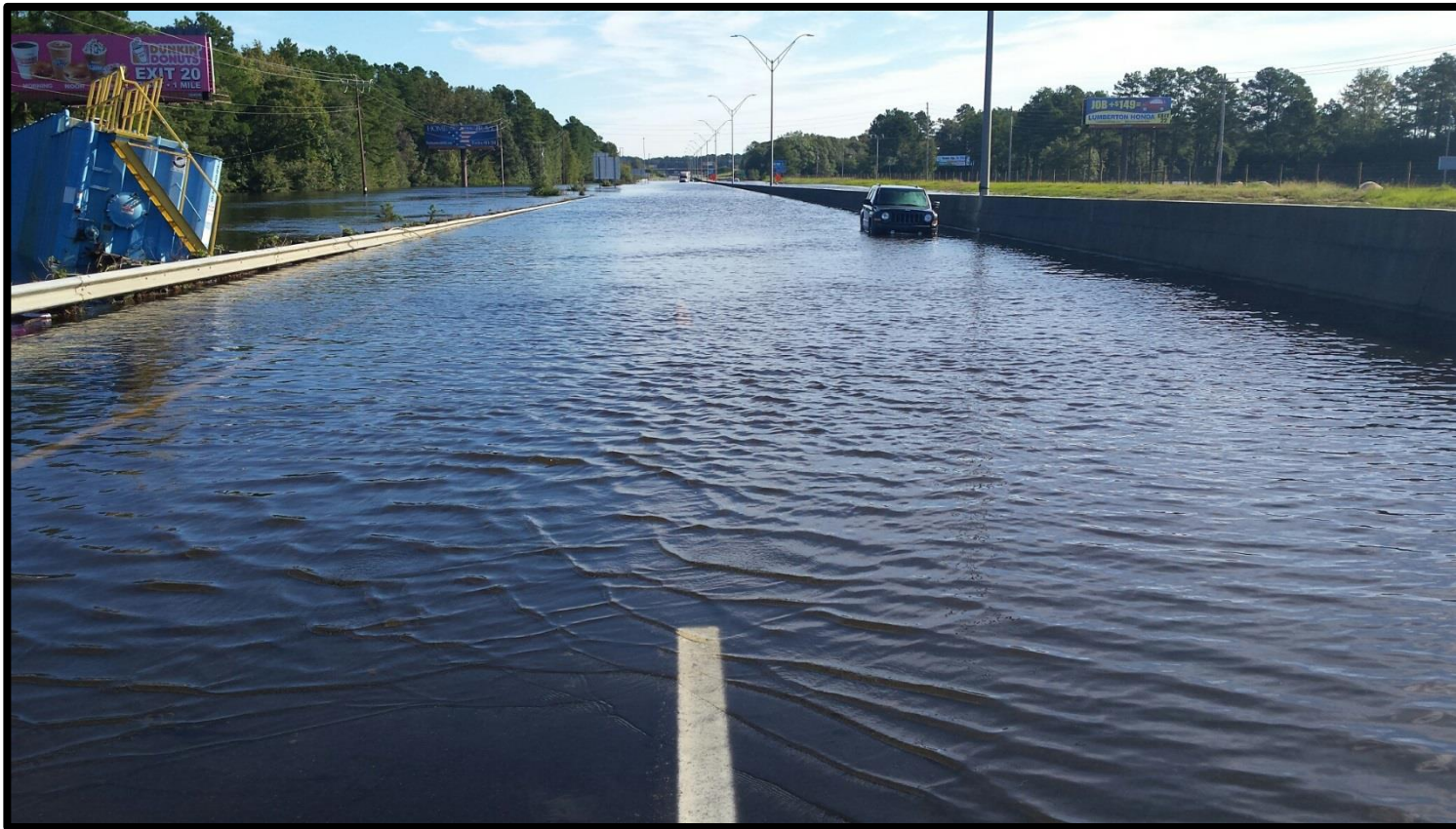


- Road Closures
- Coordinating Detours
- Shifting Resources
- 511 & Call Center
- Identify Damaged Sites
- NCDOT Flooded Facilities



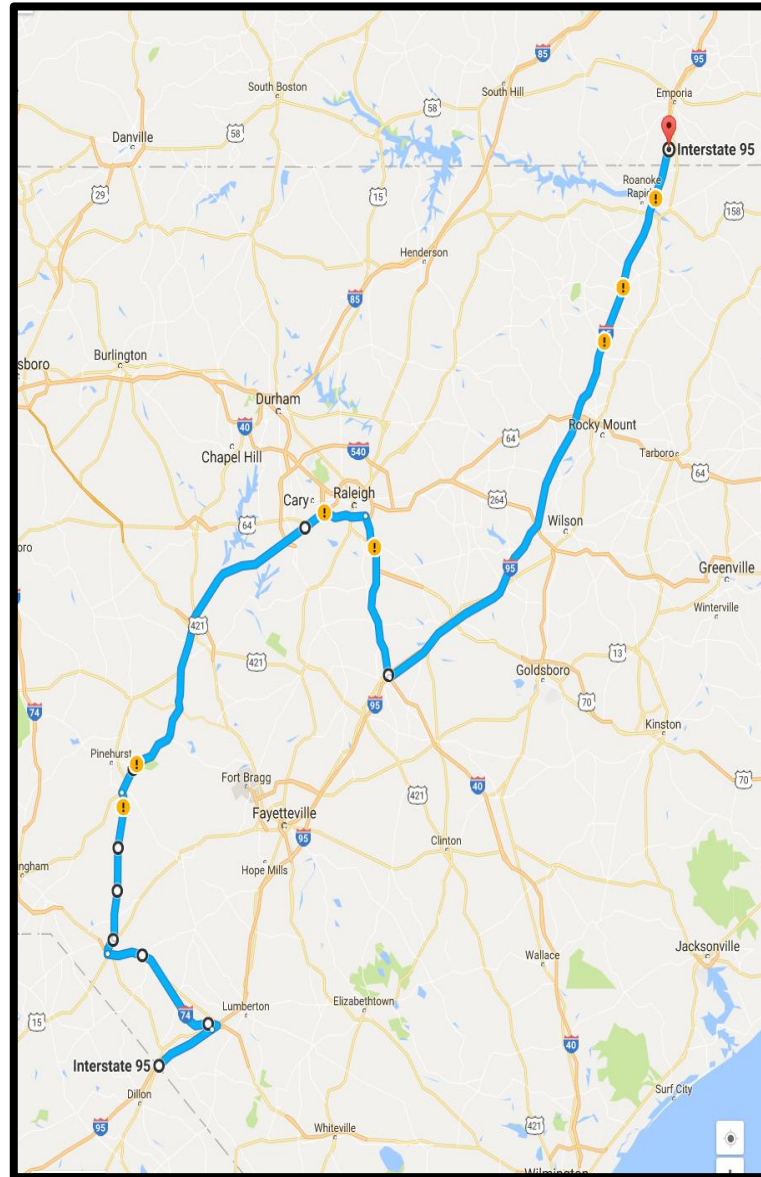
Response and Recovery – Road Closures

- At height of storm – over 600 closures
- Currently – over 500 closures



Response and Recovery - Detours

- I-95 north bound and south bound detours
- Coordination with Highway Patrol
- Coordination with local law enforcement
- Coordination with Virginia DOT and South Carolina DOT



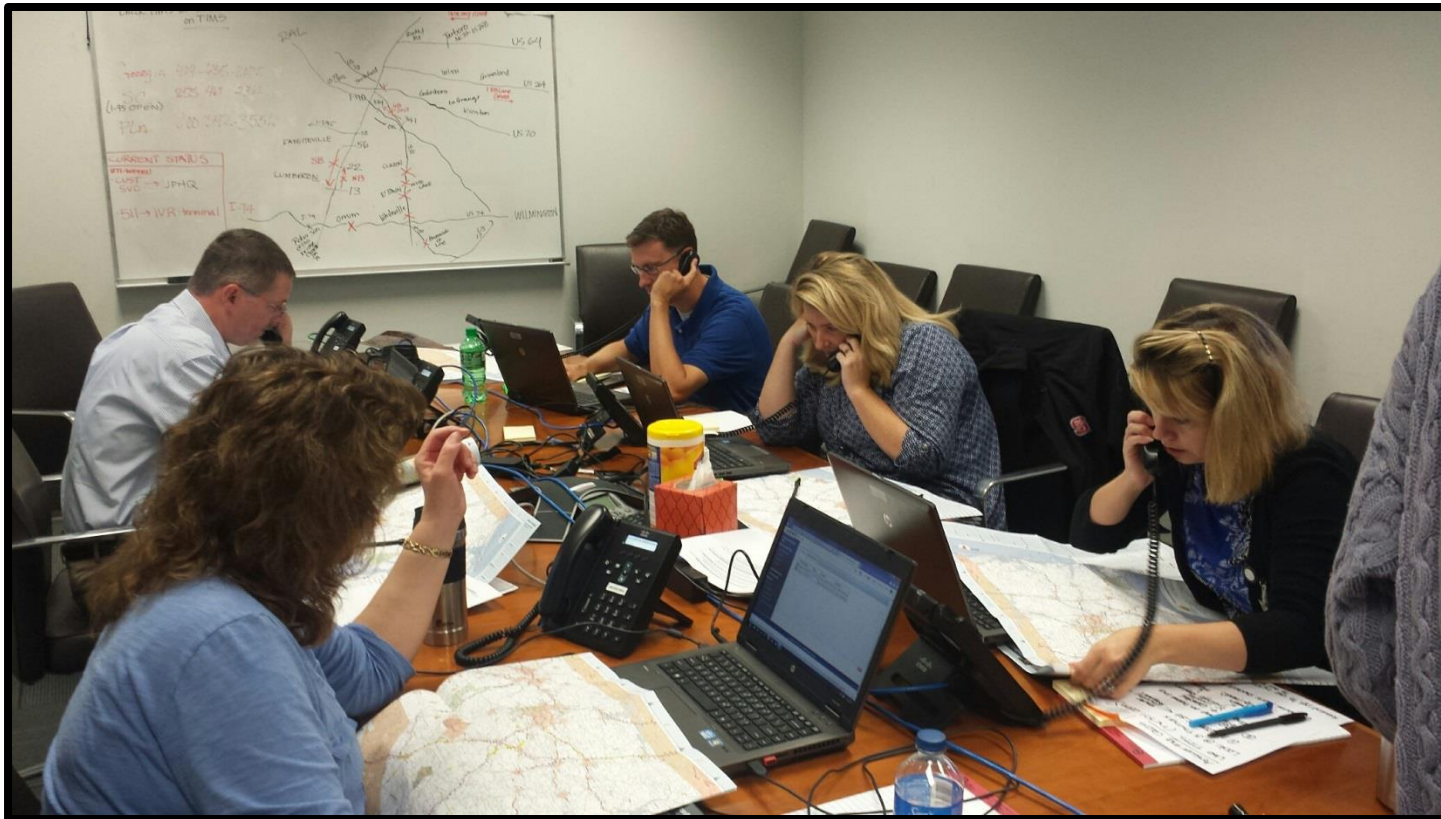
Response and Recovery

- Approximately 90% of the workforce in Divisions 1, 2, 3, 4, 5, 6 & 8 utilized
- Over 360 personnel were mobilized from west and piedmont to assist
- Additionally, personnel assisted from other groups such as traffic systems, operations, support, design and modal division staff



Response and Recovery – 511 & Call Center

- 511 – Over 120,000 customer service inquiries
- Call Center – Over 5,000 calls received



Response and Recovery – Damaged Sites

- 841 identified FEMA route sites – to date
- 311 identified FHWA route sites – to date



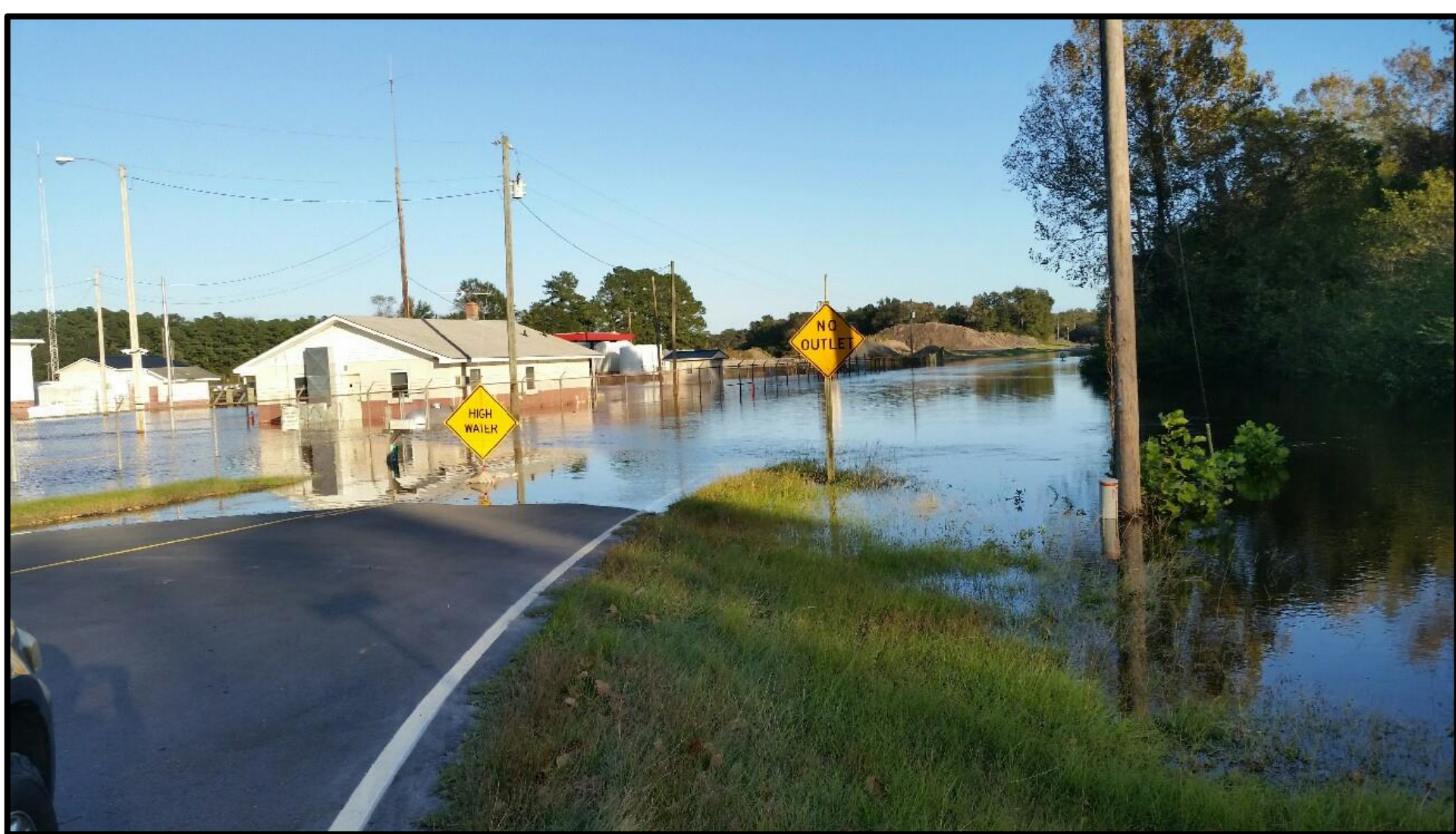
Response and Recovery – Damaged Sites



Flooded Facilities



Flooded Facilities



Recovery and Rebuilding – The Road Ahead!



Recovery and Rebuilding – The Road Ahead!



Restoring Mobility



Federal Reimbursements

FEMA

- Typically State Maintained Secondary Routes
- Declaration Threshold for Reimbursement Eligibility: ~ \$13M Statewide
- Category A: Debris Removal – Sliding Scale Reimbursement
 - 85% (days 1 – 30)
 - 80% (days 31 – 90)
 - 75% (days 91 – 180)
- Category B: Emergency Protective Measures – 75%
- Category C: Roads and Bridges – 75%
- Category E: Buildings and Equipment – 75%

FHWA

- Typically US, NC and Interstate Routes
- Declaration Threshold for Reimbursement Eligibility: \$700,000 for NCDOT
- New from MAP-21, FHWA does not participate in debris removal except for non-FEMA declared counties that have been declared by the Governor.
- Emergency Repair Reimbursements
 - 100% for all Federal Aid routes (up to 180 days)
 - 90% on Interstates (after 180 days)
 - 80% on all other Federal Aid routes (after 180 days)
- Permanent Repair Reimbursements
 - 90% on Interstates
 - 80% on other Federal Aid routes



Questions?

